Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

City of Alexandria
D.G. Hunter Generating Station
Alexandria, Rapides Parish, Louisiana
Agency Interest Number: 8494
Activity Number: PER20050001, PER20060001, PER20070001
Proposed Permit Number: 2360-00024-V1, 2360-00024-IV1, 2360-00024-IR0

I. APPLICANT

Company:

City of Alexandria PO Box 71 Alexandria, Louisiana 71309-0071

Facility:

D. G. Hunter Generating Station 1011 N Third St Alexandria, Rapides Parish, Louisiana Approximate UTM coordinates are 551.50 kilometers East and 3465.50 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

The D.G. Hunter Generating Station operates two boilers, one above ground storage tank, and three cooling towers near the intersection of Highway 165 and 3rd Street in Alexandria. The boilers use natural gas as a primary fuel source. The boilers are also capable of burning no.2 fuel oil as a backup fuel in the event of an interruption to the gas supply. In the case of such an interruption, the fuel oil acts as a stand-alone fuel until the normal gas supply can be restored. Fuel combustion is the primary source of air emissions associated with the power plant operations.

The DG Hunter Generating Station is a designated Part 70 source. The previous Title V permit, 2360-00024-V0, expired on June 26, 2005 without a timely renewal application submittal. The facility currently operates without a permit.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application was submitted on January 22, 2009 requesting a Part 70 operating permit for the D.G. Hunter Generating Station.

Project

In this permit, D.G. Hunter proposes to remove Boilers 1 and 2 (EPNs C1 and C2) and Cooling Tower X1 from service.

Proposed Permit

Permit 2360-00024-V1 will be the Part 70 operating permit for the D.G. Hunter Generating Station.

Permit 2360-00024-IV1 will be the Acid Rain permit renewal for the D.G. Hunter Generating Station.

Permit 2360-00024-IR0 will be the initial Clean Air Interstate (CAIR) permit for the D.G. Hunter Generating Station.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change*
PM ₁₀	97.70	112.14	+14.44
SO ₂	740.81	101.84	-638.97
NO _X	4,508.59	2,173.87	-2,334.72
СО	361.07	566.06	+204.99
VOC	13.74	34.91	+21.17

^{*} There has been no physical change or change in the method of operation at the facility since construction. All emission changes are based on either stack testing or AP 42 emission factors. All emission estimates are based on the worst-case operating scenario.

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Þ

City of Alexandria Alexandria City of - DG Hunter Generating Station Alexandria, Rapides Parish, Louisiana Agency Interest Number: 8494

Applicability and Exemptions of Selected Subject Items

ID No	Requirement	Notes
UNF 01 DG Hunter	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.Chapter 59]	DOES NOT APPLY. The facility does not produce, process, handle, or store any substances listed in 40 CFR 68.130, Table 59.0 of §5907, or Table 59.2 of §5913 in quantities greater than the threshold quantities listed in those respective places. [LAC 33:III.5907.A]
EQT 01 C3 – Boiler No. 3 SCN 01 ICS-3 - Interrupted Gas Supply	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 [40 CFR 60 Subpart D]	DOES NOT APPLY. The boiler was constructed before August 17, 1971 [40 CFR 60.40(c)]
	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1511.A] Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1513]	Unit emits less than 250 tons of SO ₂ per year. Record and retain at the site for at least 2 years the data required to demonstrate compliance with or exemption from SO ₂ standards of Chapter 15. Compliance data shall be reported annually in accordance with LAC 33:III.918.
EQT 02 C4 – Boiler No. 4 SCN 01 ICS-3 - Interrupted Gas Supply	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1511.A] Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1513]	Unit emits less than 250 tons of SO ₂ per year. Record and retain at the site for at least 2 years the data required to demonstrate compliance with or exemption from SO ₂ standards of Chapter 15. Compliance data shall be reported annually in accordance with LAC 33:III.918.
	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 [40 CFR 60 Subpart D]	DOES NOT APPLY. The boiler commenced construction before August 17, 1971 [40 CFR 60.40(c)]

ID No	Requirement	Notes
EQT 03 T2 – Tank No. 2	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 [40 CFR 60 Subpart K]	constructed before June 11, 1973. [40 CFR
	Storage of Volatile Organic Compounds [LAC 33:III.2103]	DOES NOT APPLY. The tank does not contain any VOC having a maximum true vapor pressure of 1.5 psia or greater. [LAC 33:III.2103.B]

Prevention of Significant Deterioration/Nonattainment Review

PSD review is not required.

Streamlined Equipment Leak Monitoring Program

There is no streamlined equipment leak monitoring program at the facility.

MACT Requirements

The facility is exempt from the provision of Chapter 51 of the LAC Title 33, Part 3 and is not subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP).

Air Quality Analysis

Emissions associated with the proposed changes were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

There is no permit shield.

VI. PERIODIC MONITORING

There is no periodic monitoring at the facility.

VII. GLOSSARY

Carbon Monoxide (CO) - A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) - An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit - See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.